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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,958	12/14/2006	Takeshi Saito	297517US2RD PCT	7388
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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER VAUGHAN, MICHAEL R				
ART UNIT		PAPER NUMBER		
2431				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/599,958

Applicant(s)

SAITO ET AL.

Examiner

MICHAEL R. VAUGHAN

Art Unit

2431

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The instant application having Application No. 10/599,958 is presented for examination by the examiner. Claims 1, 10, and 19 are amended. Claims 1-20 are pending.

Response to Amendment

Claim Rejections - 35 USC § 112

The rejection under 35 USC 112 has been overcome.

Response to Arguments

Applicant's arguments with respect to claims 1, 10, and 19 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP Application Publication 2005/0027984 to Saito et al., hereinafter Saito in view of USP Application Publication 2003/0197488 to Hulvey.

As per claim 1, Saito teaches a transmitter, comprising: a network interface unit connected to a wireless network capable of transmitting contents for which copyright protection is necessary (101);

an encryption processing unit configured to encrypt contents for which copyright protection is necessary (101);

an RTT measuring unit configured to measure a round trip time after a predetermined packet is transmitted to a receiver, until a response corresponding to the transmitted packet is received (129);

a communication permission determination unit configured to permit transmission of the contents for which protection is necessary when the round trip time measured by the RTT measuring unit is within a predetermined time (129). Saito is silent in explicitly disclosing a parameter modification unit configured to change parameters of the wireless network, the parameters improving accuracy of the round trip time when the RTT measuring unit measures the round trip time. Hulvey teaches that in Bluetooth communication, the SNIFF interval parameters influences latency between a master and slave device (0052). Hulvey also teaches that the SNIFF interval can be chosen based on the desired latency (0053). Hulvey teaches that the SNIFF interval dictates when a slave device can respond to a master and this causes a delay. Therefore it is

obvious that the SNIFF interval could cause inaccuracies in measuring RTT because the slave must wait before responding. Also from Hulvey, it is evident that a small SNIFF interval would allow the slave to respond faster, thus reducing the overhead attributed to waiting to reply. Minimizing the response delay, improves the accuracy in measuring RTT. As such, improving the accuracy of the RTT is the effect of changing the parameter (SNIFF interval). The claim is obvious because combining known methods which produce predictable results is within the ordinary capabilities of one of ordinary skill in the art. It was known that minimizing the SNIFF interval decreases the response delay from the slave device. It is also known that a long SNIFF interval increases power savings. Therefore it is obvious to use a small SNIFF interval only when determining latency.

As per claim 10, Saito teaches a receiver, comprising: a network interface unit connected to a wireless network capable of transmitting contents for which copyright protection is necessary (109);

an encryption processing unit configured to encrypt contents for which copyright protection is necessary (109);

an RTT measuring unit configured to measure a round trip time after a predetermined packet is transmitted to a receiver, until a response corresponding to the transmitted packet is received (129);

a communication permission determination unit configured to permit transmission of the contents for which protection is necessary when the round trip time measured by

the RTT measuring unit is within a predetermined time (129). Saito is silent in explicitly disclosing a parameter modification unit configured to change parameters of the wireless network, the parameters improving accuracy of the round trip time when the RTT measuring unit measures the round trip time. Hulvey teaches that in Bluetooth communication, the SNIFF interval parameters influences latency between a master and slave device (0052). Hulvey also teaches that the SNIFF interval can be chosen based on the desired latency (0053). Hulvey teaches that the SNIFF interval dictates when a slave device can respond to a master and this causes a delay. Therefore it is obvious that the SNIFF interval could cause inaccuracies in measuring RTT because the slave must wait before responding. Also from Hulvey, it is evident that a small SNIFF interval would allow the slave to respond faster, thus reducing the overhead attributed to waiting to reply. Minimizing the response delay, improves the accuracy in measuring RTT. As such, improving the accuracy of the RTT is the effect of changing the parameter (SNIFF interval). The claim is obvious because combining known methods which produce predictable results is within the ordinary capabilities of one of ordinary skill in the art. It was known that minimizing the SNIFF interval decreases the response delay from the slave device. It is also known that long SNIFF interval increases power savings. Therefore it is obvious to use a small SNIFF interval only when determining latency.

As per claim 19, Saito teaches a communication control program comprising (101): measuring a round trip time after a predetermined packet is transmitted to the

other communication apparatus, until a response corresponding to the transmitted packet is received (129);

permitting transmission or reception of contents for which copyright protection is necessary when the measured round trip time is within a predetermined time (129);

transmitting or receiving the encrypted contents via a wireless network when transmission or reception of the contents is permitted (129). Saito is silent in explicitly disclosing a parameter modification unit configured to change parameters of the wireless network, the parameters improving accuracy of the round trip time when the RTT measuring unit measures the round trip time. Hulvey teaches that in Bluetooth communication, the SNIFF interval parameters influences latency between a master and slave device (0052). Hulvey also teaches that the SNIFF interval can be chosen based on the desired latency (0053). Hulvey teaches that the SNIFF interval dictates when a slave device can respond to a master and this causes a delay. Therefore it is obvious that the SNIFF interval could cause inaccuracies in measuring RTT because the slave must wait before responding. Also from Hulvey, it is evident that a small SNIFF interval would allow the slave to respond faster, thus reducing the overhead attributed to waiting to reply. Minimizing the response delay, improves the accuracy in measuring RTT. As such, improving the accuracy of the RTT is the effect of changing the parameter (SNIFF interval). The claim is obvious because combining known methods which produce predictable results is within the ordinary capabilities of one of ordinary skill in the art. It was known that minimizing the SNIFF interval decreases the response delay from the slave device. It is also known that long SNIFF interval

increases power savings. Therefore it is obvious to use a small SNIFF interval only when determining latency.

As per claims 2 and 11, Saito teaches authentication & key exchange unit to authentication & key exchange processing with the receiver (101);

wherein the parameter modification unit the parameters to measure the round trip time when the authentication & key exchange unit performs the authentication & key exchange processing, and puts back the parameters after the measurement of the round trip time is completed, before the authentication & key exchange unit completes the authentication & key exchange processing (101 and 075).

As per claims 3 and 12, Saito teaches authentication & key unit to authentication & key exchange processing with the receiver (101);

wherein the modification unit changes the parameters to measure the round trip time when the authentication & key exchange unit performs the authentication & key exchange processing, and puts back the parameters after the authentication & key exchange unit completes the authentication & key exchange processing (101 and 075).

As per claims 4 and 13, Saito teaches authentication & key exchange unit configured to perform authentication & key exchange processing with the receiver (101); wherein the parameter modification unit changes the parameters to measure the round trip time before transmission of commands relating to contents for which copyright protection is necessary is begun, and puts back the parameters after transmission

processing of contents for which copyright protection is necessary is completed (101 and 075).

As per claims 5, 14, and 20, Saito is silent in disclosing the wireless network is Bluetooth; and the parameter modification unit changes at least one of a sniff interval expressing transmission and reception interval, a polling interval, transmission power and master-slave prescribed by a standard of Bluetooth as parameters. Saito teaches modifying the parameters during the RTT measurement (101). Saito also teaches the secure pairing of two devices not unlike the Bluetooth protocol. Saito teaches a short-ranged wireless communication but not specifically Bluetooth. Hulvey teaches a wireless network is Bluetooth; and the parameter modification unit changes at least one of a sniff interval expressing transmission and reception interval, a polling interval, transmission power and master-slave prescribed by a standard of Bluetooth as parameters (0052-53). Saito also teaches controlling the power of the devices in the wireless network (101). Hulvey also teaches this mechanism as means to conserve power among other reasons. Controlling the parameters of a Bluetooth network was well known in the art at the time of the invention. Networks have parameters. A Bluetooth network has standard parameters. Adjusting the intervals of response time between masters and slaves will affect the RTT. It is obvious that if a device can respond quicker (i.e. the intervals are shorter) and RTT is measure by the time it takes a receiver to respond, that RTT will be affected. This does not appear to be an inventive step, but merely an observation. Therefore the claim would have been obvious because controlling Bluetooth parameters was recognized as part of the ordinary

capabilities of one skilled in the art and because applying a known technique to a known system ready for improvement to yield predictable results is within those capabilities. Saito teaches a short-ranged wireless communication. Bluetooth is a type of short-ranged wireless communication. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute Bluetooth into the system of Saito. The claim would have been obvious because a person of ordinary skill has good reason to pursue the known options within his or her technical grasp.

As per claims 6 and 15, Saito is silent in disclosing the parameter modification unit sets the sniff interval shorter than a normal interval when the RTT measuring unit performs the measurement. Hulvey teaches the parameter modification unit sets the sniff interval shorter than a normal interval when the RTT measuring unit performs the measurement (0053). Examiner relies upon the rationale for combining Saito and Hulvey as cited above for combining the modification of parameters of a Bluetooth communication.

As per claims 7 and 16, Saito is silent in disclosing the parameter modification unit sets the polling interval shorter than a normal interval when the RTT measuring unit performs the measurement. Hulvey teaches the parameter modification unit sets the polling interval shorter than a normal interval (0052). Examiner relies upon the rationale for combining Saito and Hulvey as cited above for combining the modification of parameters of a Bluetooth communication.

As per claims 8 and 17, Saito is silent in disclosing the parameter modification unit sets a transmission power weaker than a normal power when the RTT measuring unit performs the measurement. Hulvey teaches the parameter modification unit sets a transmission power weaker than a normal power (0054). Examiner relies upon the rationale for combining Saito and Hulvey as cited above for combining the modification of parameters of a Bluetooth communication.

As per claims 9 and 18, Saito teaches the parameter modification unit reverses roles of a master device and a slave device when the RTT measuring unit performs the measurement (0047).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL R. VAUGHAN whose telephone number is (571)270-7316. The examiner can normally be reached on Monday - Thursday, 7:30am - 5:00pm, EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. R. V./

Examiner, Art Unit 2431

/William R. Korzuch/

Supervisory Patent Examiner, Art Unit 2431